

Molecular interactions Biochemistry and metabolism DNA synthesis, modification, repair, recombination and degradation RNA synthesis, processing, modification and degradation Protein synthesis, modification, processing and turnover Lipid synthesis, modification and turnover Carbohydrate synthesis, modification and turnover Structural biology Biochemistry and molecular mechanisms of signal transduction

Genomics, comparative genomics, functional genomics Transcriptomics Proteomics Metabolomics Glycomics Molecular genetics, reverse genetics and RNAi Epigenetics and gene regulation Bioinformatics Computational biology Systems biology Biological systems analysis, modelling and simulation

Cell biology and molecular transport mechanisms Cell cycle and division Cell metabolism Cell migration Cell death and apoptosis Cellular senescence Autophagy Cell differentiation, physiology and dynamics Cell to cell communication Organelle biology Cell signalling and cellular interactions Development, developmental genetics, Stem cell biology

Molecular mechanisms of communicable and non-communicable diseases Cancer biology Cancer genetics Neurophysiology, Molecular and cellular neurobiology and neuropathology Innate immunity and inflammation Adaptive immunity Immunosignalling Immunometabolism Immunogenetics Immunoncology Immunopathology

Autoimmunity

Microbiology Virology Bacteriology Parasitology Host-pathogen interaction Emerging and reemerging infections Prevention and treatment of infections Biological basis of inflammatory and degenerative disorders

Drug design and discovery Drug therapy Gene therapy Cellular therapy MOlecular Medicine Biological basis of inflammatory and degenerative disorders Regenerative medici